

## ***Haplopappus liatriformis* (Greene) St. John**

Palouse goldenweed

Asteraceae (Aster Family)

**Status:** State Threatened, USFWS Species of Concern

**Rank:** G2S2

**General Description:** An herbaceous perennial from a stout taproot, with 1 to several stems up to about 2 1/2 feet tall. The stems, leaves and involucre bracts have hairs which vary from being somewhat long and soft to being stiff. The leaves often have a rough texture and are also sometimes toothed. The basal leaves are tufted and generally long and narrow. The stem leaves get progressively smaller going up the stem. There are commonly several flower heads in an elongate, rather open inflorescence. Individual flower heads are less than 1 inch across and approximately 1/2 inch high. The involucre bracts are pointed and green-tipped. There are 13-21 yellow ray flowers which are less than 1/2 inch in length.

**Identification Tips:** The only other *Haplopappus* known to occur with *H. liatriformis* is *H. carthamoides*, which is shorter, has larger flower heads with less conspicuous ray flowers and larger basal leaves. The two are generally easily separable using a technical key.

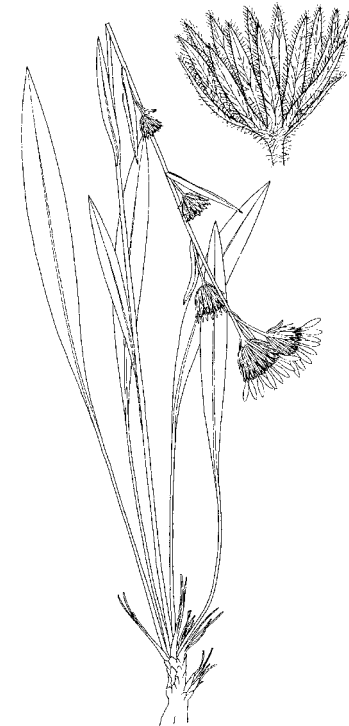
**Phenology:** Flowering occurs predominantly during July and August, but the species can be identified through mid-September.

**Range:** Local endemic to the Palouse region of southeast WA and adjacent ID in the Columbia Basin physiographic province

**Habitat:** This species can be found within the following plant associations of Daubenmire (1970): Idaho fescue/rose, ponderosa pine/snowberry, Idaho fescue/snowberry, Idaho fescue/balsamroot and the bluebunch wheatgrass/ balsamroot associations. Sites are generally quite stable plant communities which are dominated by bunchgrass with scattered patches of deciduous shrubs. Typical associated species include oneflower helianthella (*Helianthella uniflora*), Canada goldenrod (*Solidago canadensis*), prairiesmoke (*Geum triflorum*), Nootka rose (*Rosa nutkana*), yarrow (*Achillea millefolium*), and northwest

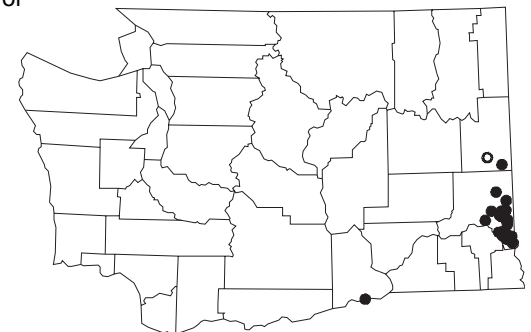
## ***Haplopappus liatriformis***

Palouse goldenweed



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Known distribution of  
*Haplopappus*  
*liatriformis*  
in Washington



● Current (1980+)

○ Historic (older than 1980)

## ***Haplopappus liatrisformis***

Palouse goldenweed



Elise Augenstein



John Gamon

## ***Haplopappus liatrisformis***

Palouse goldenweed

**Habitat** (continued): cinquefoil (*Potentilla gracilis*). Sites are typically open and on lower to upper portions of moderate slopes (0-55 percent). Substrates tend to be productive skeletal silt/loams. Elevation: 1900-3000 feet.

**Ecology:** *H. liatrisformis* is found primarily within areas that are in good ecological condition and which are dominated by native vegetation. These areas are thought to be maintained as grasslands primarily due to soil and climatic influences. The species' response to fire is unknown. Some of the sites do have a significant non-native species presence. Competition with these species may be a limiting factor for *H. liatrisformis*.

**State Status Comments:** In WA, the range is centered in Whitman Co. with one sighting in Spokane Co. The number of known populations is low, there has been a significant loss of habitat, and many populations are small and occur in isolated fragments of habitat.

**Inventory Needs:** Additional inventory efforts should focus on southern Spokane Co., along the breaks from the Palouse to the Snake River, and on isolated eyebrows of native vegetation within the Palouse.

**Threats and Management Concerns:** Most of the species' habitat has been lost through agricultural conversion. The other major threats are grazing, herbicides, and competition with non-native species. Road maintenance may pose localized threats. Maintenance of the physical integrity of the habitat is of primary importance. Consideration should be given to removal of grazing from known sites.

### **References:**

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1955. *Vascular Plants of the Pacific Northwest, Part 5: Compositae*. University of Washington Press, Seattle. 343 pp.